

(11)Publication number:

05-102418

(43) Date of publication of application: 23.04.1993

(51)Int.CI.

H01L 27/108 H01L 21/318 H01L 27/04

(21)Application number: 03-281881

(71)Applicant: OKI ELECTRIC IND CO LTD

(22)Date of filing:

03.10.1991

(72)Inventor: TANAKA HIROYUKI

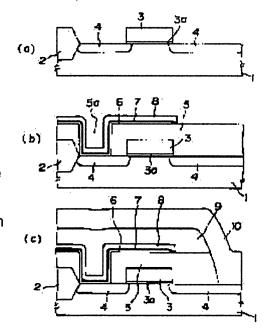
INOUE NOBUHIKO

TAKAHASHI MASASHI

(54) MANUFACTURE OF SEMICONDUCTOR DEVICE (57) Abstract:

PURPOSE: To provide a manufacturing method of a semiconductor device which enables easy formation of an extremely thin capacitor insulating film of a low defective density and a low leak current and wherein an increase of a cell capacity can be expected.

CONSTITUTION: After a gate electrode 3 and a source/drain 4 are formed on a semiconductor substrate 1, an SiO2 film 5 is formed all over and a cell contact 5a is formed. Then, after a storage electrode 6 and a silicon nitride film 7 which becomes a capacitor insulating film are formed one by one and annealed at a high temperature, a surface of the silicon nitride film is oxidized in water vapor atmosphere and a cell plate electrode 8 is formed on an upper surface thereof.



Thereafter, a BPSG 9 is formed all over and an aluminum 10 is formed on an upper surface thereof.

LEGAL STATUS

[Date of request for examination]